

WHAT IS CLAIMED IS:

1. A chemical mechanical polishing apparatus, comprising:
a circular rotary table;
a driving shaft for rotating the circular rotary table;
5 a plurality of support poles installed on the circular rotary table,
wherein the support poles can be controlled in height and moved horizontally
by sliding; and
platen pieces attached to the plurality of the support poles, respectively,
wherein a platen of a new shape is assembled by horizontally moving
10 the support poles, or the pressure applied to a wafer is controlled by regions by
controlling the height of the support poles.
2. The chemical mechanical polishing apparatus as claimed in claim 1,
wherein the support pole has a hollow support rod for blowing off slurry from
15 its inner space.
3. The chemical mechanical polishing apparatus as claimed in claim 1,
wherein an exhaust port is installed at the circular rotary table between the
support poles, from which slurry is blown off through a space between the
20 platen pieces.
4. The chemical mechanical polishing apparatus as claimed in claim 1,
wherein the platen pieces are pieces of the platen that are divided in a checker
pattern.
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5. The chemical mechanical polishing apparatus as claimed in claim 4, wherein the platen pieces are pieces that are divided into an edge of a given width and a quadrilateral central portion in the platen.

5 6. The chemical mechanical polishing apparatus as claimed in claim 1, wherein the platen pieces are pieces that are divided into an edge of a given width and a quadrilateral central portion in the platen.

7. The chemical mechanical polishing apparatus as claimed in claim 1,
10 wherein different platen pieces are attached to the central portion and the edge of the circular rotary table to control a polishing characteristic by regions.

8. The chemical mechanical polishing apparatus as claimed in claim 1,
15 wherein a pad, in which a groove is formed at an interface between the platen pieces, is attached to the platen piece.

9. The chemical mechanical polishing apparatus as claimed in claim 8, wherein the pad includes an abrasive-embedded pad.

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